



COPY OF PAPERS
ORIGINALLY FILED

SEQUENCE LISTING

<110> Huang

Hoekstra, Merl F

Lee, Sandra K

Cairns, Nicholas

Kauvar, Lawrence M

Sportsman, J Richard

<120> PHOSPHORYLATION ASSAYS

<130> L JL 354B

<140> US 09/596,444

<141> 2000-06-19

<160> 48

<170> PatentIn version 3.1

b
<210> 1

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES
<222> (5)..(5)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (10)..(10)
<223> BIOTINYULATION

<400> 1

Gly Glu Glu Gly Tyr Met Pro Met Gly Lys

1 5 10

<210> 2
<211> 17
<212> PRT
<213> Artificial Sequence

b1
<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (1)..(1)
<223> BIOTINYULATION

<220>

<221> MOD_RES

<222> (1)..(1)

<223> AMIDATION

<400> 2

Glu Gly Pro Trp Leu Glu Glu Glu Ala Tyr Gly Trp Met Asp

1

5

10

15

Phe

<210> 3

<211> 8

<212> PRT

<213> Artificial Sequence

b1
<220>

<223> Artificial sequence is synthesized

<400> 3

Asp Tyr Met Thr Met Gln Ile Gly

1

5

<210> 4

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 4

Ser Arg Gly Asp Tyr Met Thr Met Gln Ile Gly

1

5

10

<210> 5

<211> 11

<212> PRT

<213> Artificial Sequence

b1
<220>

<223> Artificial sequence is synthesized

<400> 5

Glu Lys Arg Pro Ser Gln Arg Ser Lys Tyr Leu

1

5

10

<210> 6
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (5)..(5)
<223> PHOSPHORYLATION

<400> 6

Glu Lys Arg Pro Ser Arg Ser Lys Tyr Leu

1 5 10

b1
<210> 7
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (8) .. (8)

<223> PHOSPHORYLATION

<400> 7

Glu Lys Arg Pro Ser Gln Arg Ser Tyr Leu

1 5 10

<210> 8

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

b1
<220>

<221> MOD_RES

<222> (5) .. (5)

<223> PHOSPHORYLATION

<220>

<221> MOD_RES

<222> (7) .. (7)

<223> PHOSPHORYLATION

<400> 8

Glu Lys Arg Pro Ser Arg Ser Tyr Leu

1 5

<210> 9

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (11) .. (11)

<223> PHOSPHORYLATION

b1
<400> 9

Lys Arg Arg Glu Ile Leu Ser Arg Arg Pro Ser Tyr Arg Lys

1 5 10

<210> 10
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (7)...(7)
<223> PHOSPHORYLATION

<400> 10

Lys His Phe Pro Gln Phe Ser Tyr Ser Ala Ser

1 5 10

b1
<210> 11
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (1) .. (1)

<223> PHOSPHORYLATION

<400> 11

Ser Pro Glu Leu Glu Arg Leu Ile Ile Gln Cys

1

5

10

<210> 12

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (9) .. (9)

<223> PHOSPHORYLATION

b1
<220>

<221> MOD_RES

<222> (11) .. (11)

<223> PHOSPHORYLATION

<400> 12

Gly Ser Pro Ser Val Arg Cys Ser Ser Met Ser

1 5 10

<210> 13

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (6) .. (6)

<223> PHOSPHORYLATION

P
<400> 13

Arg Ser Arg His Ser Ser Tyr Pro Ala Gly Thr

1 5 10

<210> 14
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

<400> 14

Leu Thr Pro Leu Lys

1 5

b1
<210> 15
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (2) .. (2)

<223> PHOSPHORYLATION

<400> 15

Phe Thr Pro Leu Gln

1 5

<210> 16

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> PHOSPHORYLATION

b1
<400> 16

Arg Lys Arg Thr Leu Arg Arg Leu

1 5

<210> 17
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (5)..(5)
<223> PHOSPHORYLATION

<400> 17

Leu Arg Arg Ala Ser Leu Gly

1 5

b1
<210> 18
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (8) . . (8)

<223> PHOSPHORYLATION

<400> 18

Lys Lys Leu Asn Arg Thr Leu Ser Val Ala Ser Leu

1 5 10

<210> 19

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (6) . . (6)

<223> PHOSPHORYLATION

b1

<220>

<221> MOD_RES

<222> (7) .. (7)

<223> AMIDATION

<400> 19

Arg Pro Arg Ala Ala Thr Phe

1 5

<210> 20

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (5) .. (5)

<223> PHOSPHORYLATION

b1 <220>

<221> MOD_RES

<222> (7) .. (7)

<223> AMIDATION

<400> 20

Leu Arg Arg Ala Ser Leu Gly

1 5

<210> 21

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (2) .. (2)

<223> PHOSPHORYLATION

<220>

<221> MOD_RES

<222> (13) .. (13)

<223> PHOSPHORYLATION

b
<220>

<221> MOD_RES

<222> (16)..(16)

<223> AMIDATION

<220>

<221> MOD_RES

<222> (1)..(1)

<223> LUMINESCENT LABEL CONJUGATION

<400> 21

Ala Tyr Thr Gly Leu Ser Thr Arg Asn Gln Glu Thr Tyr Ala Thr His

1

5

10

15

<210> 22

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

b1
<220>

<221> MOD_RES

<222> (1)..(1)

<223> LUMINESCENT LABEL CONJUGATION

<220>
<221> MOD_RES
<222> (1)..(1)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (3)..(3)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (5)..(5)
<223> AMIDATION

b) <400> 22

Tyr Tyr Tyr Ile Glu

<210> 23
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (1)..(1)
<223> LUMINESCENT LABEL CONJUGATION

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

b1
<220>
<221> MOD_RES
<222> (13)..(13)
<223> PHOSPHORYLATION

<220>

<221> MOD_RES

<222> (16)..(16)

<223> AMIDATION

<400> 23

Gly Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu

1 5 10 15

<210> 24

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (7)..(7)

<223> PHOSPHORYLATION

b1
<220>

<221> MOD_RES

<222> (1)..(1)

<223> LUMINESCENT LABEL CONJUGATION

<400> 24

Arg Phe Ala Arg Lys Gly Ser Leu Arg Gln Lys Asn Val

1 5 10

<210> 25

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (1)...(1)

<223> LUMINESCENT LABEL CONJUGATION

<400> 25

b\ Leu Arg Arg Ala Ser Leu Gly

1 5

<210> 26

<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (13)..(13)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (16)..(16)
<223> AMIDATION

b1
<400> 26

Ala Tyr Thr Gly Leu Ser Thr Arg Asn Gln Glu Thr Tyr Ala Thr His

<210> 27
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (1)..(1)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

B
<220>
<221> MOD_RES
<222> (3)..(3)
<223> PHOSPHORYLATION

<220>

<221> MOD_RES
<222> (5)..(5)
<223> AMIDATION

<400> 27

Tyr Tyr Tyr Ile Glu

1 5

<210> 28
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Artificial sequence is synthesized

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

b1
<220>
<221> MOD_RES
<222> (13)..(13)
<223> PHOSPHORYLATION

<220>

<221> MOD_RES

<222> (16)..(16)

<223> AMIDATION

<400> 28

Gly Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu

1

5

10

15

<210> 29

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

b
<220>

<221> MOD_RES

<222> (5)..(5)

<223> PHOSPHORYLATION

<400> 29

Glu Lys Arg Pro Ser Arg Ser Lys Tyr Leu

1 5 10

<210> 30

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (8) . . (8)

<223> PHOSPHORYLATION

<400> 30

Glu Lys Arg Pro Ser Gln Arg Ser Tyr Leu

1 5 10

b1
<210> 31

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (16)..(16)

<223> AMIDATION

<400> 31

Ala Tyr Thr Gly Leu Ser Thr Arg Asn Gln Glu Thr Tyr Ala Thr His

1

5

10

15

<210> 32

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (5)..(5)

<223> AMIDATION

<400> 32

Tyr Tyr Tyr Ile Glu

1 5

<210> 33

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (16)..(16)

<223> AMIDATION

<400> 33

Gly Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu

1 5 10 15

b1
<210> 34

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 34

Glu Lys Arg Pro Ser Arg Ser Lys Tyr Leu

1 5 10

<210> 35

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 35

Glu Lys Arg Pro Ser Gln Arg Ser Tyr Leu

1 5 10

b1
<210> 36

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 36

Glu Lys Arg Pro Ser Arg Ser Tyr Leu

1 5

<210> 37

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 37

Lys Arg Arg Glu Ile Leu Ser Arg Arg Pro Ser Tyr Arg Lys

1 5 10

b1
<210> 38

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 38

Lys His Phe Pro Gln Phe Ser Tyr Ser Ala Ser

1 5 10

<210> 39

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 39

Ser Pro Glu Leu Glu Arg Leu Ile Ile Gln Cys

1 5 10

b1 <210> 40

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 40

Gly Ser Pro Ser Val Arg Cys Ser Ser Met Ser

1 5 10

<210> 41

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 41

Arg Ser Arg His Ser Ser Tyr Pro Ala Gly Thr

1 5 10

<210> 42

<211> 5

<212> PRT

<213> Artificial Sequence

b1
<220>

<223> Artificial sequence is synthesized

<400> 42

Leu Thr Pro Leu Lys

1 5

<210> 43

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 43

Phe Thr Pro Leu Gln

1 5

b!<210> 44

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 44

Arg Lys Arg Thr Leu Arg Arg Leu

1 5

<210> 45

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 45

Leu Arg Arg Ala Ser Leu Gly

1 5

<210> 46

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<400> 46

Lys Lys Leu Asn Arg Thr Leu Ser Val Ala Ser Leu

1 5 10

<210> 47

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (7) .. (7)

<223> AMIDATION

<400> 47

Arg Pro Arg Ala Ala Thr Phe

1 5

b1
<210> 48

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial sequence is synthesized

<220>

<221> MOD_RES

<222> (7) .. (7)

<223> AMIDATION

b1
conc'd <400> 48

Leu Arg Arg Ala Ser Leu Gly

1

5